

REMARKS

In the outstanding Office Action, claims 1-29 were presented for examination. Applicant has amended claims 1, 3, 9, 11, 17, 19, 23 and 27, and cancelled claims 18 and 28. Applicant requests further consideration of the claims in view of the foregoing amendments and following remarks.

In response to the objections to claims 3, 11, and 19, applicant has amended claims 1, 9, and 19 to remove the word "vacuum" therefrom.

Applicant has amended claims 1, 3, 9, 11, 19 and 23 to more succinctly claim the invention. Support for the amendments is found throughout the specification and drawings. Accordingly, applicant submits that no new matter has been introduced by the amendments.

Claims 1, 4-9, 12-17, 20-23, 25-27, and 29 were rejected under 35 U.S.C. 112, first paragraph, because the Examiner asserted that the specification, while being enabling for X-rays, does not reasonably provide enablement for any and all types of imaging such as MRI, ultrasound, etc. Applicant respectfully disagrees with the Examiner's characterization of the invention. In particular, applicant notes that none of the claims 1, 4-9, 12-17, 20-23, 25-27, and 29 are specifically directed to an MRI or an ultrasound device. Accordingly, a rejection based on the foregoing assertion is clearly not proper. In contrast, the claims 1, 4-9, 12-17, 20-23, 25-27, and 29 are directed to an electron emitter assembly and a method of generating an electron beam. Further, the specification provides a detailed and extensive description of the electron emitter assembly and method of use. See Figures 2-8 and the paragraphs 17-48 of the specification. Further, the electron emitter assembly can be utilized to generate X-rays as described in the various embodiments in the specification. Accordingly, because the specification provides a detailed and extensive description of the hardware and methodology for enabling the claimed invention, applicant submits that the specification does provide enablement of the claims 1, 4-9, 12-17, 20-23, 25-27, and 29 under 35 U.S.C. 112, first paragraph.

Claims 1-6, 8-13, 15, 16, and 23-26 were rejected under 35 U.S.C. 102(b) based on Dunham et al. (U.S. Patent No. 6,385,292 B1).

Referring to independent claim 1, as amended, the claim recites in part:

"a housing having a light receiving window configured to allow light from the light source to pass therethrough;

a photo-responsive device disposed in the housing configured to receive the light passing through the light receiving window, the photo-responsive device operably coupled to an electron emitter device, the photo-responsive device applying a voltage to the electron emitter device in response to receiving the light to induce the electron emitter device to emit electrons."

Referring to Dunham et al., the reference is directed to solid state CT system. Dunham et al. does indicate that photo emitters may also be used for cathode 58. See Dunham et al. column 4, lines 61-62. However, the reference does not provide any teaching of: "a housing having a light receiving window configured to allow light from the light source to pass therethrough", as recited in claim 1. Further, the reference does not provide any teaching of: "a photo-responsive device disposed in the housing configured to receive the light passing through the light receiving window", as recited in claim 1. Further, the reference does not provide any teaching of: "the photo-responsive device applying a voltage to the electron emitter device in response to receiving the light to induce the electron emitter device to emit electrons", as recited in claim 1.

Accordingly, because Dunham et al. does not teach each and every limitation of independent claim 1, and claims 2-6 and 8 which depend from claim 1, applicant submits that claims 2-6 and 8 are allowable over Dunham et al.

Referring to claim 9, as amended, the claim recites in part:

"a housing having a light receiving window configured to allow light from the light source to pass therethrough;

a plurality of photo-responsive devices disposed in the housing configured to receive the light passing through the light receiving window and a plurality of electron emitter devices disposed in the housing, each photo-responsive device being operably coupled to a

corresponding electron emitter device, each photo-responsive device applying a voltage to the electron emitter device to induce the corresponding electron emitter device to emit electrons in response to the photo-responsive device receiving at least a portion of the light."

Referring to Dunham et al., the reference is directed to solid state CT system. However, the reference does not provide any teaching of: "a housing having a light receiving window configured to allow light from the light source to pass therethrough", as recited in claim 9. Further, the reference does not provide any teaching of: "each photo-responsive device applying a voltage to the electron emitter device to induce the corresponding electron emitter device to emit electrons in response to the photo-responsive device receiving at least a portion of the light", as recited in claim 9.

Accordingly, because Dunham et al. does not teach each and every limitation of independent claim 9, and claims 10-13, 15 and 16 which depend from claim 9, applicant submits that claims 9-13 and 15-16 are allowable over Dunham et al.

Referring to claim 23, as amended, the claim recites in part:

"emitting light from the light source that passes through the light receiving window of the electron emitter assembly onto the photo-responsive device operably coupled to the electron emitter device;

applying a voltage from the photo-responsive device to the electron emitter device in response to the photo-response device receiving the light to induce the electron emitter device to emit electrons towards the anode"

Referring to Dunham et al., the reference is directed to solid state CT system. However, the reference does not provide any teaching of: "emitting light from the light source that passes through the light receiving window of the electron emitter assembly onto the photo-responsive device operably coupled to the electron emitter device", as recited in claim 23, as amended. Further, the reference does not provide any teaching of: "applying a voltage from the photo-responsive device to the electron emitter device in response to the photo-response device receiving the light to induce the electron emitter device to emit electrons towards the anode", as recited in claim 23.

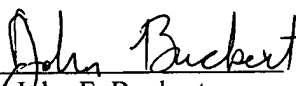
Accordingly, because Dunham et al. does not teach each and every limitation of independent claim 23, and claims 24-26 which depend from claim 9, applicant submits that claims 23 and 24-26 are allowable over Dunham et al.

Applicant notes with appreciation Examiner's indication that claims 17-22 and 27-29 would be allowable if rewritten or amended to overcome the rejections under 35 U.S.C. 112. Claim 17 has been amended to include the limitations of claim 18. Claim 27 has been amended to include the limitations of claim 28. Applicant submits that the flowchart illustrated in Figures 9-10 and the Figure 3 enable the claims 17-22 and 27-29. Thus, applicant respectfully submits that claims 17-22 and 27-29 are in compliance with 35 U.S.C. 112, 1st paragraph.

In view of the foregoing remarks, it is respectfully submitted that the instant application is in a condition for allowance. Such action is most earnestly solicited. If for any reason the Examiner feels that consultation with applicant's attorney would be helpful in the advancement of the prosecution, the Examiner is invited to call the telephone number below for an interview.

If there are any charges due with respect to this Response or otherwise, please charge them to Deposit Account No. 07-0845.

Respectfully submitted,

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